
**CARDIAC STIMULATION METHOD AND ASSOCIATED SYSTEM
USING A STIMULATION HISTOGRAM AS AN
INTEGRITY DIAGNOSTIC TOOL TO MONITOR THE
PERFORMANCE OF AUTOMATIC CAPTURE VERIFICATION**

ABSTRACT OF THE INVENTION

An implantable cardiac stimulation device and method provide a histogram for storing the number of primary and backup stimulation pulses delivered at each amplitude setting, to monitor the performance of the automatic capture verification. The stimulation device delivers cardiac stimulation therapy in which a stimulation histogram advantageously stores the number of primary pulses delivered at each stimulation output, or range of outputs, and separately stores the number of high-energy backup stimulation pulses delivered. Knowing the historical frequency of the applied stimulation amplitudes is useful to a physician in selecting future stimulation pulse output settings and the working margin. This information is also useful in determining the expected remaining battery life. The stimulation histogram further provides a useful diagnostic tool for evaluating the integrity of the stimulation device, lead system and performance of the automatic capture algorithm.